

Appendix B

E-UTRA Band 25

TABLE OF CONTENTS

1	MAIN TEST INSTRUMENTS	3
2	MEASUREMENT UNCERTAINTY	3
3	EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA	4
	3.1. Test Result.....	4
4	PEAK-TO-AVERAGE RATIO	11
	4.1. Test Result.....	11
	4.2. Test Plots	11
5	MODULATION CHARACTERISTICS	14
	5.1. For LTE	14
	5.1.1. Test BAND = LTE Band 25	14
6	26DB BANDWIDTH AND OCCUPIED BANDWIDTH	16
	6.1. Test Result.....	16
	6.2. Test Plots	17
7	BAND EDGES COMPLIANCE	29
	7.1. Test Plots	29
8	SPURIOUS EMISSION AT ANTENNA TERMINAL	45
	8.1. Test Plots	45
9	FREQUENCY STABILITY	50

1 Main Test Instruments

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal.Due date
				(yyyy-mm-dd)	(yyyy-mm-dd)
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018/3/13	2021/3/12
Spectrum Analyzer (20Hz-43GHz)	Rohde & Schwarz	FSU43	SEM004-08	2018/4/2	2019/4/1
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-01	2017/6/27	2020/6/26
Horn Antenna (800MHz-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018/4/13	2021/4/12
Horn Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017/10/17	2020/10/16
Amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2018/9/2	2019/9/2
Low Noise Amplifier (100MHz-18GHz)	Black Diamond Series	BDLNA-0118-352810	SEM005-05	2018/9/2	2019/9/2
Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	EMC2063	2018/10/20	2019/10/19
Pre-amplifier (26-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2018/4/2	2019/4/1
Band filter	N/A	N/A	N/A	N/A	N/A
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2018/7/12	2019/7/11
Wideband Radio Communication Tester	Anritsu	MT8821C	6201462742	2018/5/2	2019/5/1
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	W005-02	2018/3/13	2019/3/12
RF conducted test					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal.Due date
				(yyyy-mm-dd)	(yyyy-mm-dd)
Dual Output Mobile Communication DC Source	Agilent Technologies Inc	66311B	W009-09	2018/9/15	2019/9/15
Signal Analyzer	Rohde & Schwarz	FSV	W025-05	2018/3/13	2019/3/12
Coaxial Cable	SGS	N/A	SEM031-01	2018/7/12	2019/7/11
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2018/9/2	2019/9/2
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	HTC-1	W006-17	2018/9/10	2019/9/10
Temperature Chamber	GIANT FORCE	ICT-150-40-CP-AR	W027-03	2018/11/27	2019/11/27
Wideband Radio Communication Tester	Anritsu	MT8821C	6201462742	2018/5/2	2019/5/1
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	W005-02	2018/3/13	2019/3/12

2 Measurement Uncertainty

For a 95% confidence level ($k = 2$), the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 as following:

Test Item	Extended Uncertainty	Data
Transmit Output Power Data	Power [dBm]	$U = \pm 0.37 \text{ dB}$
Bandwidth	Magnitude [%]	$U = \pm 0.2\%$
Band Edge Compliance	Disturbance Power [dBm]	$U = \pm 2.0 \text{ dB}$
Spurious Emissions, Conducted	Disturbance Power [dBm]	$U = \pm 2.0 \text{ dB}$
Frequency Stability	Frequency Accuracy [ppm]	$U = \pm 0.24 \text{ ppm}$

3 Effective (Isotropic) Radiated Power Output Data

3.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band25	1.4MHz	QPSK	26047	1RB#0	22.24	22.54	33.00	PASS
Band25	1.4MHz	QPSK	26047	1RB#2	22.49	22.79	33.00	PASS
Band25	1.4MHz	QPSK	26047	1RB#5	22.34	22.64	33.00	PASS
Band25	1.4MHz	QPSK	26047	3RB#0	22.41	22.71	33.00	PASS
Band25	1.4MHz	QPSK	26047	3RB#1	22.56	22.86	33.00	PASS
Band25	1.4MHz	QPSK	26047	3RB#3	22.56	22.86	33.00	PASS
Band25	1.4MHz	QPSK	26047	6RB#0	21.40	21.70	33.00	PASS
Band25	1.4MHz	QPSK	26365	1RB#0	22.20	22.50	33.00	PASS
Band25	1.4MHz	QPSK	26365	1RB#2	22.45	22.75	33.00	PASS
Band25	1.4MHz	QPSK	26365	1RB#5	22.26	22.56	33.00	PASS
Band25	1.4MHz	QPSK	26365	3RB#0	22.74	23.04	33.00	PASS
Band25	1.4MHz	QPSK	26365	3RB#1	22.74	23.04	33.00	PASS
Band25	1.4MHz	QPSK	26365	3RB#3	22.69	22.99	33.00	PASS
Band25	1.4MHz	QPSK	26365	6RB#0	21.53	21.83	33.00	PASS
Band25	1.4MHz	QPSK	26683	1RB#0	22.39	22.69	33.00	PASS
Band25	1.4MHz	QPSK	26683	1RB#2	22.47	22.77	33.00	PASS
Band25	1.4MHz	QPSK	26683	1RB#5	22.28	22.58	33.00	PASS
Band25	1.4MHz	QPSK	26683	3RB#0	22.55	22.85	33.00	PASS
Band25	1.4MHz	QPSK	26683	3RB#1	22.76	23.06	33.00	PASS
Band25	1.4MHz	QPSK	26683	3RB#3	22.64	22.94	33.00	PASS
Band25	1.4MHz	QPSK	26683	6RB#0	21.54	21.84	33.00	PASS
Band25	1.4MHz	16QAM	26047	1RB#0	21.65	21.95	33.00	PASS
Band25	1.4MHz	16QAM	26047	1RB#2	21.81	22.11	33.00	PASS
Band25	1.4MHz	16QAM	26047	1RB#5	21.77	22.07	33.00	PASS
Band25	1.4MHz	16QAM	26047	3RB#0	21.57	21.87	33.00	PASS
Band25	1.4MHz	16QAM	26047	3RB#1	21.29	21.59	33.00	PASS
Band25	1.4MHz	16QAM	26047	3RB#3	21.30	21.60	33.00	PASS
Band25	1.4MHz	16QAM	26047	6RB#0	20.34	20.64	33.00	PASS
Band25	1.4MHz	16QAM	26365	1RB#0	21.71	22.01	33.00	PASS
Band25	1.4MHz	16QAM	26365	1RB#2	21.33	21.63	33.00	PASS
Band25	1.4MHz	16QAM	26365	1RB#5	21.79	22.09	33.00	PASS
Band25	1.4MHz	16QAM	26365	3RB#0	21.19	21.49	33.00	PASS
Band25	1.4MHz	16QAM	26365	3RB#1	21.37	21.67	33.00	PASS

JianYan Testing Group Shenzhen Co., Ltd.

Report No: JYTSZB-R12-2102967

Band25	1.4MHz	16QAM	26365	3RB#3	21.31	21.61	33.00	PASS
Band25	1.4MHz	16QAM	26365	6RB#0	20.37	20.67	33.00	PASS
Band25	1.4MHz	16QAM	26683	1RB#0	21.41	21.71	33.00	PASS
Band25	1.4MHz	16QAM	26683	1RB#2	21.02	21.32	33.00	PASS
Band25	1.4MHz	16QAM	26683	1RB#5	21.21	21.51	33.00	PASS
Band25	1.4MHz	16QAM	26683	3RB#0	21.36	21.66	33.00	PASS
Band25	1.4MHz	16QAM	26683	3RB#1	21.25	21.55	33.00	PASS
Band25	1.4MHz	16QAM	26683	3RB#3	21.47	21.77	33.00	PASS
Band25	1.4MHz	16QAM	26683	6RB#0	20.39	20.69	33.00	PASS
Band25	3MHz	QPSK	26055	1RB#0	22.39	22.69	33.00	PASS
Band25	3MHz	QPSK	26055	1RB#8	22.46	22.76	33.00	PASS
Band25	3MHz	QPSK	26055	1RB#14	22.03	22.33	33.00	PASS
Band25	3MHz	QPSK	26055	8RB#0	21.44	21.74	33.00	PASS
Band25	3MHz	QPSK	26055	8RB#4	21.44	21.74	33.00	PASS
Band25	3MHz	QPSK	26055	8RB#7	21.59	21.89	33.00	PASS
Band25	3MHz	QPSK	26055	15RB#0	21.56	21.86	33.00	PASS
Band25	3MHz	QPSK	26365	1RB#0	22.17	22.47	33.00	PASS
Band25	3MHz	QPSK	26365	1RB#8	22.64	22.94	33.00	PASS
Band25	3MHz	QPSK	26365	1RB#14	22.49	22.79	33.00	PASS
Band25	3MHz	QPSK	26365	8RB#0	21.46	21.76	33.00	PASS
Band25	3MHz	QPSK	26365	8RB#4	21.48	21.78	33.00	PASS
Band25	3MHz	QPSK	26365	8RB#7	21.43	21.73	33.00	PASS
Band25	3MHz	QPSK	26365	15RB#0	21.53	21.83	33.00	PASS
Band25	3MHz	QPSK	26675	1RB#0	22.09	22.39	33.00	PASS
Band25	3MHz	QPSK	26675	1RB#8	22.16	22.46	33.00	PASS
Band25	3MHz	QPSK	26675	1RB#14	22.37	22.67	33.00	PASS
Band25	3MHz	QPSK	26675	8RB#0	21.50	21.80	33.00	PASS
Band25	3MHz	QPSK	26675	8RB#4	21.57	21.87	33.00	PASS
Band25	3MHz	QPSK	26675	8RB#7	21.54	21.84	33.00	PASS
Band25	3MHz	QPSK	26675	15RB#0	21.66	21.96	33.00	PASS
Band25	3MHz	16QAM	26055	1RB#0	21.79	22.09	33.00	PASS
Band25	3MHz	16QAM	26055	1RB#8	21.39	21.69	33.00	PASS
Band25	3MHz	16QAM	26055	1RB#14	21.69	21.99	33.00	PASS
Band25	3MHz	16QAM	26055	8RB#0	20.23	20.53	33.00	PASS
Band25	3MHz	16QAM	26055	8RB#4	20.50	20.80	33.00	PASS
Band25	3MHz	16QAM	26055	8RB#7	20.53	20.83	33.00	PASS
Band25	3MHz	16QAM	26055	15RB#0	20.23	20.53	33.00	PASS
Band25	3MHz	16QAM	26365	1RB#0	21.25	21.55	33.00	PASS

JianYan Testing Group Shenzhen Co., Ltd.

Report No: JYTSZB-R12-2102967

Band25	3MHz	16QAM	26365	1RB#8	21.37	21.67	33.00	PASS
Band25	3MHz	16QAM	26365	1RB#14	21.66	21.96	33.00	PASS
Band25	3MHz	16QAM	26365	8RB#0	20.40	20.70	33.00	PASS
Band25	3MHz	16QAM	26365	8RB#4	20.55	20.85	33.00	PASS
Band25	3MHz	16QAM	26365	8RB#7	20.45	20.75	33.00	PASS
Band25	3MHz	16QAM	26365	15RB#0	20.59	20.89	33.00	PASS
Band25	3MHz	16QAM	26675	1RB#0	21.33	21.63	33.00	PASS
Band25	3MHz	16QAM	26675	1RB#8	21.15	21.45	33.00	PASS
Band25	3MHz	16QAM	26675	1RB#14	21.94	22.24	33.00	PASS
Band25	3MHz	16QAM	26675	8RB#0	20.32	20.62	33.00	PASS
Band25	3MHz	16QAM	26675	8RB#4	20.46	20.76	33.00	PASS
Band25	3MHz	16QAM	26675	8RB#7	20.52	20.82	33.00	PASS
Band25	3MHz	16QAM	26675	15RB#0	20.65	20.95	33.00	PASS
Band25	5MHz	QPSK	26065	1RB#0	22.29	22.59	33.00	PASS
Band25	5MHz	QPSK	26065	1RB#12	22.16	22.46	33.00	PASS
Band25	5MHz	QPSK	26065	1RB#24	22.07	22.37	33.00	PASS
Band25	5MHz	QPSK	26065	12RB#0	21.46	21.76	33.00	PASS
Band25	5MHz	QPSK	26065	12RB#13	21.46	21.76	33.00	PASS
Band25	5MHz	QPSK	26065	12RB#6	21.48	21.78	33.00	PASS
Band25	5MHz	QPSK	26065	25RB#0	21.47	21.77	33.00	PASS
Band25	5MHz	QPSK	26365	1RB#0	22.28	22.58	33.00	PASS
Band25	5MHz	QPSK	26365	1RB#12	22.33	22.63	33.00	PASS
Band25	5MHz	QPSK	26365	1RB#24	22.44	22.74	33.00	PASS
Band25	5MHz	QPSK	26365	12RB#0	21.53	21.83	33.00	PASS
Band25	5MHz	QPSK	26365	12RB#13	21.56	21.86	33.00	PASS
Band25	5MHz	QPSK	26365	12RB#6	21.48	21.78	33.00	PASS
Band25	5MHz	QPSK	26365	25RB#0	21.48	21.78	33.00	PASS
Band25	5MHz	QPSK	26665	1RB#0	22.28	22.58	33.00	PASS
Band25	5MHz	QPSK	26665	1RB#12	22.32	22.62	33.00	PASS
Band25	5MHz	QPSK	26665	1RB#24	22.24	22.54	33.00	PASS
Band25	5MHz	QPSK	26665	12RB#0	21.57	21.87	33.00	PASS
Band25	5MHz	QPSK	26665	12RB#13	21.53	21.83	33.00	PASS
Band25	5MHz	QPSK	26665	12RB#6	21.51	21.81	33.00	PASS
Band25	5MHz	QPSK	26665	25RB#0	21.52	21.82	33.00	PASS
Band25	5MHz	16QAM	26065	1RB#0	21.07	21.37	33.00	PASS
Band25	5MHz	16QAM	26065	1RB#12	21.02	21.32	33.00	PASS
Band25	5MHz	16QAM	26065	1RB#24	21.84	22.14	33.00	PASS
Band25	5MHz	16QAM	26065	12RB#0	20.30	20.60	33.00	PASS

JianYan Testing Group Shenzhen Co., Ltd.

Report No: JYTSZB-R12-2102967

Band25	5MHz	16QAM	26065	12RB#13	20.47	20.77	33.00	PASS
Band25	5MHz	16QAM	26065	12RB#6	20.57	20.87	33.00	PASS
Band25	5MHz	16QAM	26065	25RB#0	20.47	20.77	33.00	PASS
Band25	5MHz	16QAM	26365	1RB#0	21.67	21.97	33.00	PASS
Band25	5MHz	16QAM	26365	1RB#12	21.75	22.05	33.00	PASS
Band25	5MHz	16QAM	26365	1RB#24	21.42	21.72	33.00	PASS
Band25	5MHz	16QAM	26365	12RB#0	20.60	20.90	33.00	PASS
Band25	5MHz	16QAM	26365	12RB#13	20.57	20.87	33.00	PASS
Band25	5MHz	16QAM	26365	12RB#6	20.66	20.96	33.00	PASS
Band25	5MHz	16QAM	26365	25RB#0	20.45	20.75	33.00	PASS
Band25	5MHz	16QAM	26665	1RB#0	21.75	22.05	33.00	PASS
Band25	5MHz	16QAM	26665	1RB#12	21.89	22.19	33.00	PASS
Band25	5MHz	16QAM	26665	1RB#24	21.44	21.74	33.00	PASS
Band25	5MHz	16QAM	26665	12RB#0	20.42	20.72	33.00	PASS
Band25	5MHz	16QAM	26665	12RB#13	20.32	20.62	33.00	PASS
Band25	5MHz	16QAM	26665	12RB#6	20.21	20.51	33.00	PASS
Band25	5MHz	16QAM	26665	25RB#0	20.43	20.73	33.00	PASS
Band25	10MHz	QPSK	26090	1RB#0	22.35	22.65	33.00	PASS
Band25	10MHz	QPSK	26090	1RB#24	22.34	22.64	33.00	PASS
Band25	10MHz	QPSK	26090	1RB#49	22.30	22.60	33.00	PASS
Band25	10MHz	QPSK	26090	25RB#0	21.44	21.74	33.00	PASS
Band25	10MHz	QPSK	26090	25RB#12	21.49	21.79	33.00	PASS
Band25	10MHz	QPSK	26090	25RB#25	21.45	21.75	33.00	PASS
Band25	10MHz	QPSK	26090	50RB#0	21.52	21.82	33.00	PASS
Band25	10MHz	QPSK	26365	1RB#0	22.29	22.59	33.00	PASS
Band25	10MHz	QPSK	26365	1RB#24	22.70	23.00	33.00	PASS
Band25	10MHz	QPSK	26365	1RB#49	22.33	22.63	33.00	PASS
Band25	10MHz	QPSK	26365	25RB#0	21.56	21.86	33.00	PASS
Band25	10MHz	QPSK	26365	25RB#12	21.56	21.86	33.00	PASS
Band25	10MHz	QPSK	26365	25RB#25	21.44	21.74	33.00	PASS
Band25	10MHz	QPSK	26365	50RB#0	21.59	21.89	33.00	PASS
Band25	10MHz	QPSK	26640	1RB#0	22.16	22.46	33.00	PASS
Band25	10MHz	QPSK	26640	1RB#24	22.78	23.08	33.00	PASS
Band25	10MHz	QPSK	26640	1RB#49	22.41	22.71	33.00	PASS
Band25	10MHz	QPSK	26640	25RB#0	21.56	21.86	33.00	PASS
Band25	10MHz	QPSK	26640	25RB#12	21.43	21.73	33.00	PASS
Band25	10MHz	QPSK	26640	25RB#25	21.50	21.80	33.00	PASS
Band25	10MHz	QPSK	26640	50RB#0	21.45	21.75	33.00	PASS

JianYan Testing Group Shenzhen Co., Ltd.

Report No: JYTSZB-R12-2102967

Band25	10MHz	16QAM	26090	1RB#0	21.32	21.62	33.00	PASS
Band25	10MHz	16QAM	26090	1RB#24	21.57	21.87	33.00	PASS
Band25	10MHz	16QAM	26090	1RB#49	21.84	22.14	33.00	PASS
Band25	10MHz	16QAM	26090	25RB#0	20.48	20.78	33.00	PASS
Band25	10MHz	16QAM	26090	25RB#12	20.59	20.89	33.00	PASS
Band25	10MHz	16QAM	26090	25RB#25	20.54	20.84	33.00	PASS
Band25	10MHz	16QAM	26090	50RB#0	20.63	20.93	33.00	PASS
Band25	10MHz	16QAM	26365	1RB#0	21.08	21.38	33.00	PASS
Band25	10MHz	16QAM	26365	1RB#24	21.93	22.23	33.00	PASS
Band25	10MHz	16QAM	26365	1RB#49	21.91	22.21	33.00	PASS
Band25	10MHz	16QAM	26365	25RB#0	20.41	20.71	33.00	PASS
Band25	10MHz	16QAM	26365	25RB#12	20.52	20.82	33.00	PASS
Band25	10MHz	16QAM	26365	25RB#25	20.55	20.85	33.00	PASS
Band25	10MHz	16QAM	26365	50RB#0	20.69	20.99	33.00	PASS
Band25	10MHz	16QAM	26640	1RB#0	21.84	22.14	33.00	PASS
Band25	10MHz	16QAM	26640	1RB#24	21.88	22.18	33.00	PASS
Band25	10MHz	16QAM	26640	1RB#49	21.92	22.22	33.00	PASS
Band25	10MHz	16QAM	26640	25RB#0	20.72	21.02	33.00	PASS
Band25	10MHz	16QAM	26640	25RB#12	20.43	20.73	33.00	PASS
Band25	10MHz	16QAM	26640	25RB#25	20.38	20.68	33.00	PASS
Band25	10MHz	16QAM	26640	50RB#0	20.51	20.81	33.00	PASS
Band25	15MHz	QPSK	26115	1RB#0	22.57	22.87	33.00	PASS
Band25	15MHz	QPSK	26115	1RB#38	22.33	22.63	33.00	PASS
Band25	15MHz	QPSK	26115	1RB#74	22.57	22.87	33.00	PASS
Band25	15MHz	QPSK	26115	36RB#0	21.49	21.79	33.00	PASS
Band25	15MHz	QPSK	26115	36RB#18	21.51	21.81	33.00	PASS
Band25	15MHz	QPSK	26115	36RB#39	21.52	21.82	33.00	PASS
Band25	15MHz	QPSK	26115	75RB#0	21.51	21.81	33.00	PASS
Band25	15MHz	QPSK	26365	1RB#0	22.30	22.60	33.00	PASS
Band25	15MHz	QPSK	26365	1RB#38	22.47	22.77	33.00	PASS
Band25	15MHz	QPSK	26365	1RB#74	22.17	22.47	33.00	PASS
Band25	15MHz	QPSK	26365	36RB#0	21.55	21.85	33.00	PASS
Band25	15MHz	QPSK	26365	36RB#18	21.53	21.83	33.00	PASS
Band25	15MHz	QPSK	26365	36RB#39	21.48	21.78	33.00	PASS
Band25	15MHz	QPSK	26365	75RB#0	21.56	21.86	33.00	PASS
Band25	15MHz	QPSK	26615	1RB#0	22.48	22.78	33.00	PASS
Band25	15MHz	QPSK	26615	1RB#38	22.43	22.73	33.00	PASS
Band25	15MHz	QPSK	26615	1RB#74	22.60	22.90	33.00	PASS

JianYan Testing Group Shenzhen Co., Ltd.

Report No: JYTSZB-R12-2102967

Band25	15MHz	QPSK	26615	36RB#0	21.52	21.82	33.00	PASS
Band25	15MHz	QPSK	26615	36RB#18	21.50	21.80	33.00	PASS
Band25	15MHz	QPSK	26615	36RB#39	21.49	21.79	33.00	PASS
Band25	15MHz	QPSK	26615	75RB#0	21.54	21.84	33.00	PASS
Band25	15MHz	16QAM	26115	1RB#0	21.26	21.56	33.00	PASS
Band25	15MHz	16QAM	26115	1RB#38	21.44	21.74	33.00	PASS
Band25	15MHz	16QAM	26115	1RB#74	21.41	21.71	33.00	PASS
Band25	15MHz	16QAM	26115	36RB#0	20.51	20.81	33.00	PASS
Band25	15MHz	16QAM	26115	36RB#18	20.61	20.91	33.00	PASS
Band25	15MHz	16QAM	26115	36RB#39	20.58	20.88	33.00	PASS
Band25	15MHz	16QAM	26115	75RB#0	20.60	20.90	33.00	PASS
Band25	15MHz	16QAM	26365	1RB#0	21.71	22.01	33.00	PASS
Band25	15MHz	16QAM	26365	1RB#38	21.53	21.83	33.00	PASS
Band25	15MHz	16QAM	26365	1RB#74	21.48	21.78	33.00	PASS
Band25	15MHz	16QAM	26365	36RB#0	21.52	21.82	33.00	PASS
Band25	15MHz	16QAM	26365	36RB#18	20.53	20.83	33.00	PASS
Band25	15MHz	16QAM	26365	36RB#39	20.38	20.68	33.00	PASS
Band25	15MHz	16QAM	26365	75RB#0	20.59	20.89	33.00	PASS
Band25	15MHz	16QAM	26615	1RB#0	21.49	21.79	33.00	PASS
Band25	15MHz	16QAM	26615	1RB#38	21.28	21.58	33.00	PASS
Band25	15MHz	16QAM	26615	1RB#74	21.69	21.99	33.00	PASS
Band25	15MHz	16QAM	26615	36RB#0	20.76	21.06	33.00	PASS
Band25	15MHz	16QAM	26615	36RB#18	20.64	20.94	33.00	PASS
Band25	15MHz	16QAM	26615	36RB#39	20.49	20.79	33.00	PASS
Band25	15MHz	16QAM	26615	75RB#0	20.53	20.83	33.00	PASS
Band25	20MHz	QPSK	26140	1RB#0	22.34	22.64	33.00	PASS
Band25	20MHz	QPSK	26140	1RB#49	22.67	22.97	33.00	PASS
Band25	20MHz	QPSK	26140	1RB#99	22.43	22.73	33.00	PASS
Band25	20MHz	QPSK	26140	50RB#0	21.62	21.92	33.00	PASS
Band25	20MHz	QPSK	26140	50RB#25	21.62	21.92	33.00	PASS
Band25	20MHz	QPSK	26140	50RB#50	21.62	21.92	33.00	PASS
Band25	20MHz	QPSK	26140	100RB#0	21.56	21.86	33.00	PASS
Band25	20MHz	QPSK	26365	1RB#0	22.28	22.58	33.00	PASS
Band25	20MHz	QPSK	26365	1RB#49	22.71	23.01	33.00	PASS
Band25	20MHz	QPSK	26365	1RB#99	22.32	22.62	33.00	PASS
Band25	20MHz	QPSK	26365	50RB#0	21.59	21.89	33.00	PASS
Band25	20MHz	QPSK	26365	50RB#25	21.56	21.86	33.00	PASS
Band25	20MHz	QPSK	26365	50RB#50	21.61	21.91	33.00	PASS

JianYan Testing Group Shenzhen Co., Ltd.

Report No: JYTSZB-R12-2102967

Band25	20MHz	QPSK	26365	100RB#0	21.60	21.90	33.00	PASS
Band25	20MHz	QPSK	26590	1RB#0	22.07	22.37	33.00	PASS
Band25	20MHz	QPSK	26590	1RB#49	22.69	22.99	33.00	PASS
Band25	20MHz	QPSK	26590	1RB#99	22.50	22.80	33.00	PASS
Band25	20MHz	QPSK	26590	50RB#0	21.55	21.85	33.00	PASS
Band25	20MHz	QPSK	26590	50RB#25	21.60	21.90	33.00	PASS
Band25	20MHz	QPSK	26590	50RB#50	21.53	21.83	33.00	PASS
Band25	20MHz	QPSK	26590	100RB#0	21.67	21.97	33.00	PASS
Band25	20MHz	16QAM	26140	1RB#0	21.20	21.50	33.00	PASS
Band25	20MHz	16QAM	26140	1RB#49	21.33	21.63	33.00	PASS
Band25	20MHz	16QAM	26140	1RB#99	21.79	22.09	33.00	PASS
Band25	20MHz	16QAM	26140	50RB#0	20.61	20.91	33.00	PASS
Band25	20MHz	16QAM	26140	50RB#25	20.69	20.99	33.00	PASS
Band25	20MHz	16QAM	26140	50RB#50	20.76	21.06	33.00	PASS
Band25	20MHz	16QAM	26140	100RB#0	21.77	22.07	33.00	PASS
Band25	20MHz	16QAM	26365	1RB#0	21.83	22.13	33.00	PASS
Band25	20MHz	16QAM	26365	1RB#49	21.28	21.58	33.00	PASS
Band25	20MHz	16QAM	26365	1RB#99	21.63	21.93	33.00	PASS
Band25	20MHz	16QAM	26365	50RB#0	20.72	21.02	33.00	PASS
Band25	20MHz	16QAM	26365	50RB#25	20.62	20.92	33.00	PASS
Band25	20MHz	16QAM	26365	50RB#50	20.58	20.88	33.00	PASS
Band25	20MHz	16QAM	26365	100RB#0	20.67	20.97	33.00	PASS
Band25	20MHz	16QAM	26590	1RB#0	21.11	21.41	33.00	PASS
Band25	20MHz	16QAM	26590	1RB#49	21.76	22.06	33.00	PASS
Band25	20MHz	16QAM	26590	1RB#99	21.98	22.28	33.00	PASS
Band25	20MHz	16QAM	26590	50RB#0	20.53	20.83	33.00	PASS
Band25	20MHz	16QAM	26590	50RB#25	20.73	21.03	33.00	PASS
Band25	20MHz	16QAM	26590	50RB#50	20.56	20.86	33.00	PASS
Band25	20MHz	16QAM	26590	100RB#0	20.49	20.79	33.00	PASS

Note:

a: For getting the EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should be taken to calculate it,

$$\text{EIRP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBi]}$$

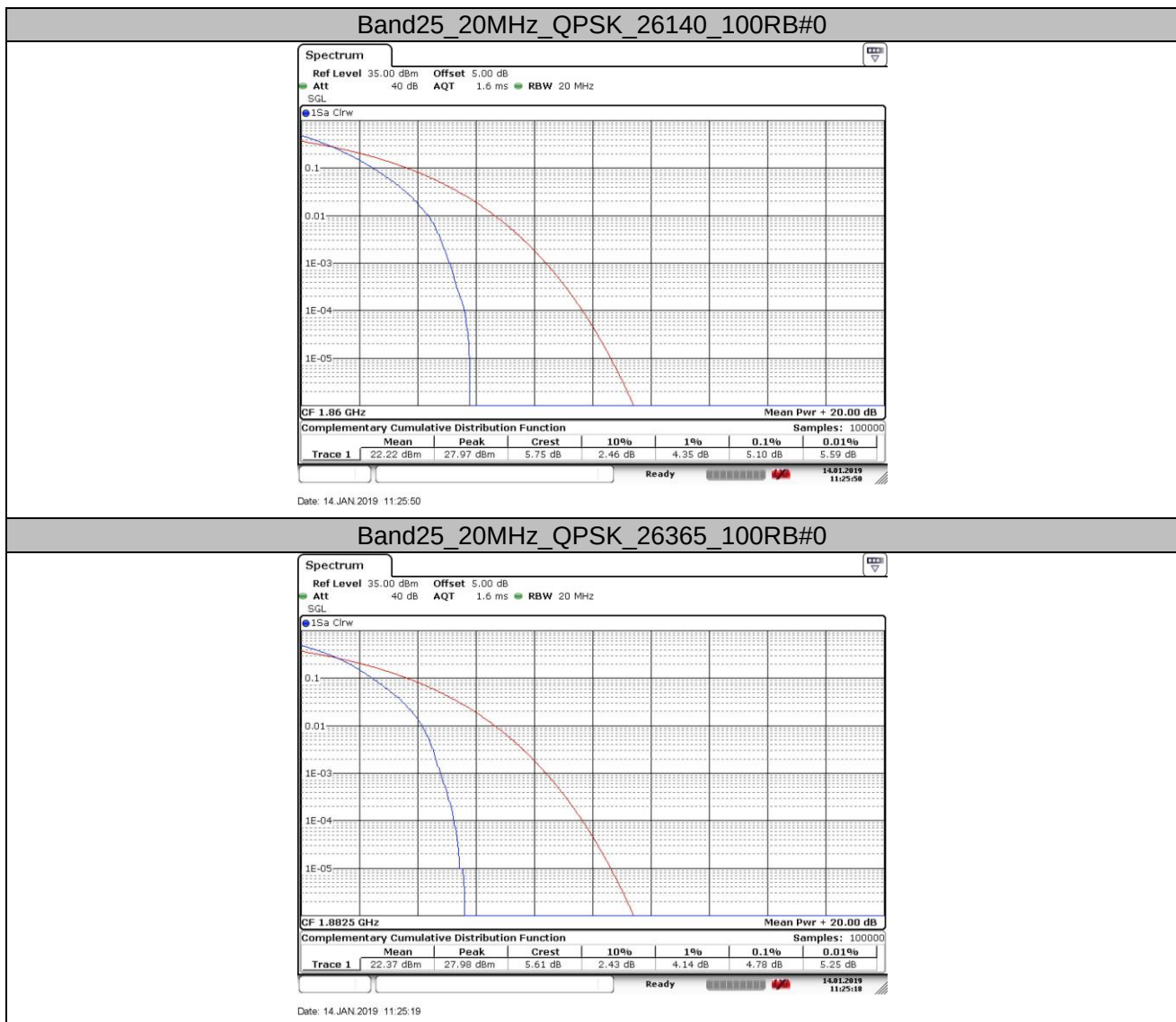
b: SGP=Signal Generator Level

4 Peak-to-Average Ratio

4.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band25	20MHz	QPSK	26140	100RB#0	5.10	13	PASS
Band25	20MHz	QPSK	26365	100RB#0	4.78	13	PASS
Band25	20MHz	QPSK	26590	100RB#0	4.84	13	PASS
Band25	20MHz	16QAM	26140	100RB#0	6.12	13	PASS
Band25	20MHz	16QAM	26365	100RB#0	6.03	13	PASS
Band25	20MHz	16QAM	26590	100RB#0	6.12	13	PASS

4.2. Test Plots

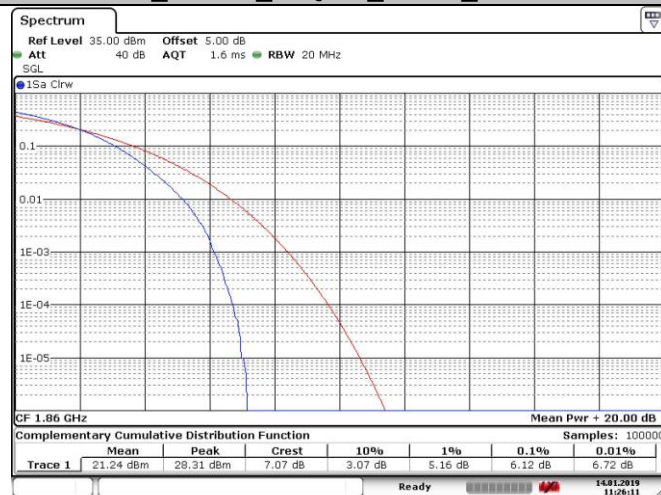


Band25_20MHz_QPSK_26590_100RB#0



Date: 14 JAN 2019 11:28:27

Band25_20MHz_16QAM_26140_100RB#0



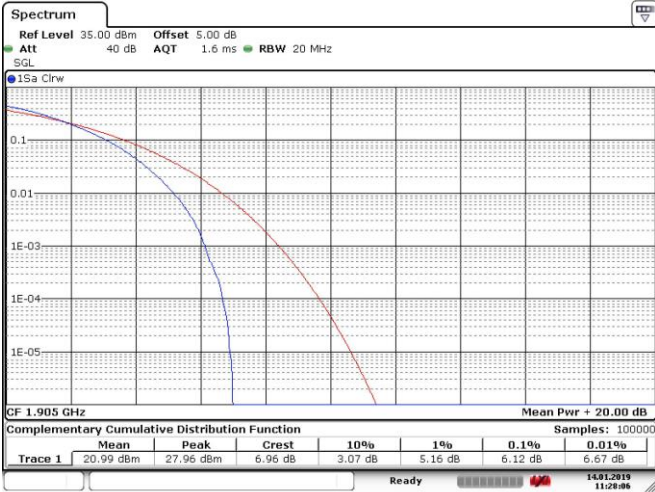
Date: 14 JAN 2019 11:28:11

Band25_20MHz_16QAM_26365_100RB#0



Date: 14 JAN 2019 11:24:47

Band25_20MHz_16QAM_26590_100RB#0



Date: 14 JAN 2019 11:28:06

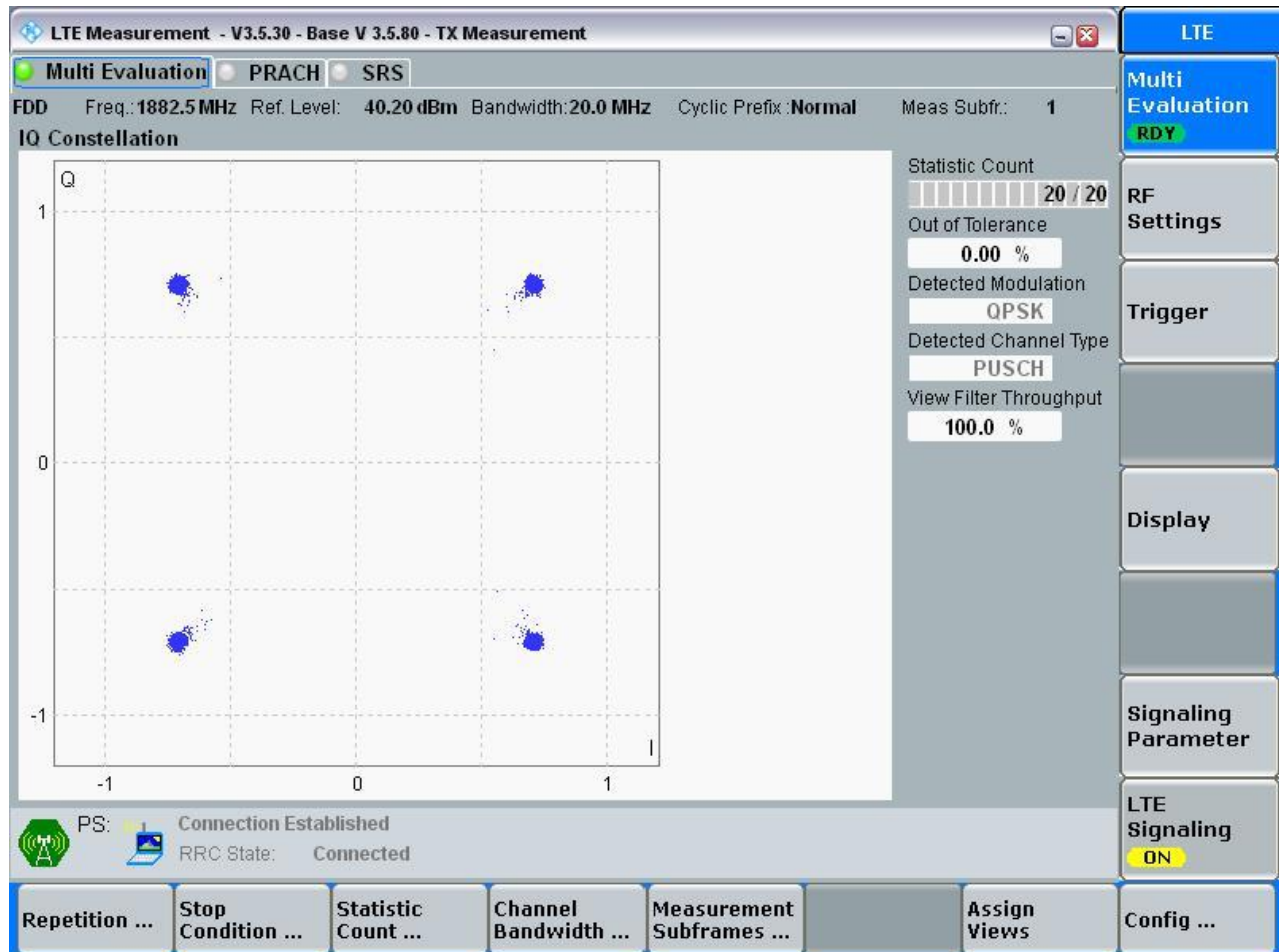
5 Modulation Characteristics

5.1. For LTE

5.1.1. Test BAND = LTE Band 25

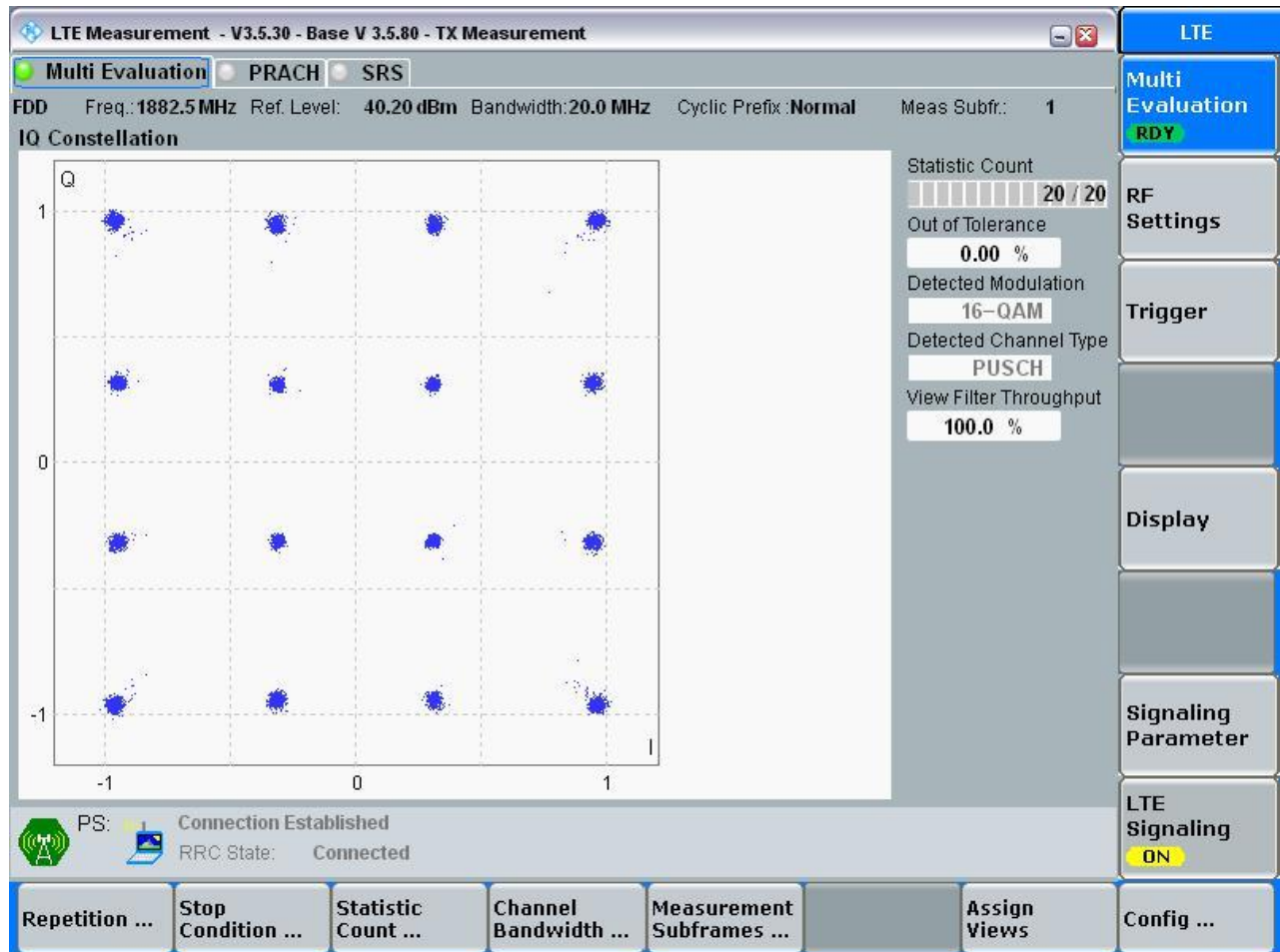
5.1.1.1 Test Mode = LTE /TM1 20MHz

5.1.1.1.1 Test Channel = MCH



5.1.1.2 Test Mode = LTE /TM2 20MHz

5.1.1.2.1 Test Channel = MCH

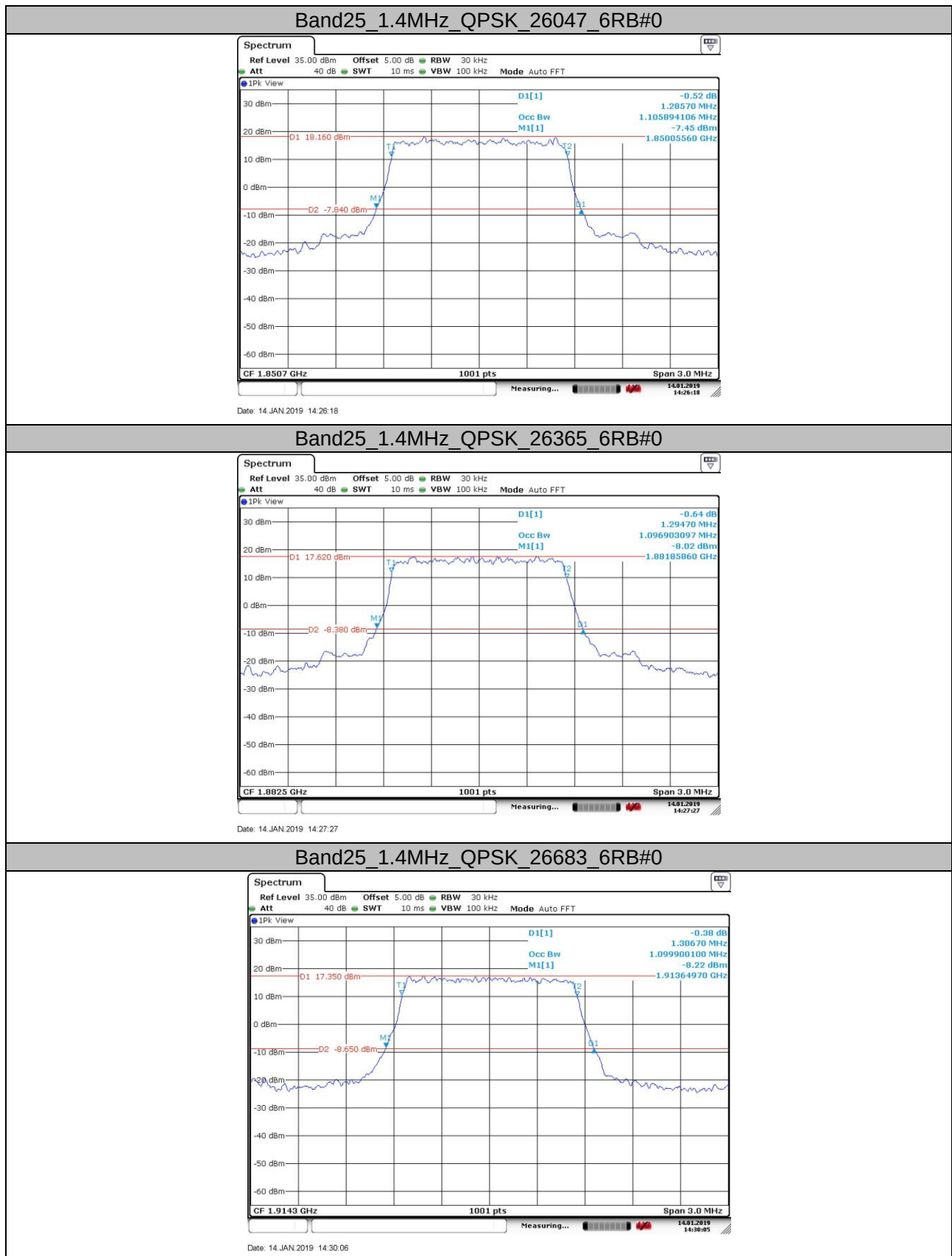


6 26dB Bandwidth and Occupied Bandwidth

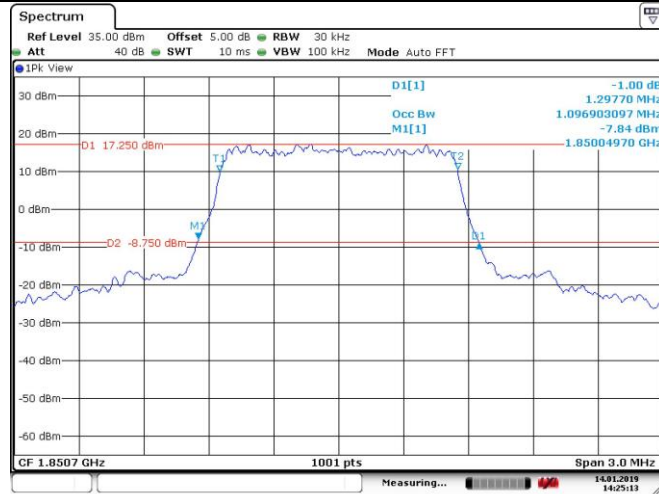
6.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band25	1.4MHz	QPSK	26047	6RB#0	1.106	1.286	PASS
Band25	1.4MHz	QPSK	26365	6RB#0	1.097	1.295	PASS
Band25	1.4MHz	QPSK	26683	6RB#0	1.100	1.307	PASS
Band25	1.4MHz	16QAM	26047	6RB#0	1.097	1.298	PASS
Band25	1.4MHz	16QAM	26365	6RB#0	1.100	1.307	PASS
Band25	1.4MHz	16QAM	26683	6RB#0	1.097	1.298	PASS
Band25	3MHz	QPSK	26055	15RB#0	2.685	2.919	PASS
Band25	3MHz	QPSK	26365	15RB#0	2.691	2.925	PASS
Band25	3MHz	QPSK	26675	15RB#0	2.685	2.937	PASS
Band25	3MHz	16QAM	26055	15RB#0	2.685	2.937	PASS
Band25	3MHz	16QAM	26365	15RB#0	2.685	2.937	PASS
Band25	3MHz	16QAM	26675	15RB#0	2.679	2.931	PASS
Band25	5MHz	QPSK	26065	25RB#0	4.486	4.938	PASS
Band25	5MHz	QPSK	26365	25RB#0	4.486	4.915	PASS
Band25	5MHz	QPSK	26665	25RB#0	4.466	4.895	PASS
Band25	5MHz	16QAM	26065	25RB#0	4.476	4.868	PASS
Band25	5MHz	16QAM	26365	25RB#0	4.486	4.935	PASS
Band25	5MHz	16QAM	26665	25RB#0	4.476	4.945	PASS
Band25	10MHz	QPSK	26090	50RB#0	8.951	9.755	PASS
Band25	10MHz	QPSK	26365	50RB#0	8.911	9.670	PASS
Band25	10MHz	QPSK	26640	50RB#0	8.911	9.690	PASS
Band25	10MHz	16QAM	26090	50RB#0	8.911	9.635	PASS
Band25	10MHz	16QAM	26365	50RB#0	8.911	9.670	PASS
Band25	10MHz	16QAM	26640	50RB#0	8.911	9.650	PASS
Band25	15MHz	QPSK	26115	75RB#0	13.457	14.865	PASS
Band25	15MHz	QPSK	26365	75RB#0	13.367	14.715	PASS
Band25	15MHz	QPSK	26615	75RB#0	13.397	14.715	PASS
Band25	15MHz	16QAM	26115	75RB#0	13.457	14.715	PASS
Band25	15MHz	16QAM	26365	75RB#0	13.427	14.715	PASS
Band25	15MHz	16QAM	26615	75RB#0	13.397	14.715	PASS
Band25	20MHz	QPSK	26140	100RB#0	17.902	19.580	PASS
Band25	20MHz	QPSK	26365	100RB#0	17.862	19.178	PASS
Band25	20MHz	QPSK	26590	100RB#0	17.822	19.176	PASS
Band25	20MHz	16QAM	26140	100RB#0	17.862	19.341	PASS
Band25	20MHz	16QAM	26365	100RB#0	17.862	19.298	PASS
Band25	20MHz	16QAM	26590	100RB#0	17.822	19.336	PASS

6.2. Test Plots

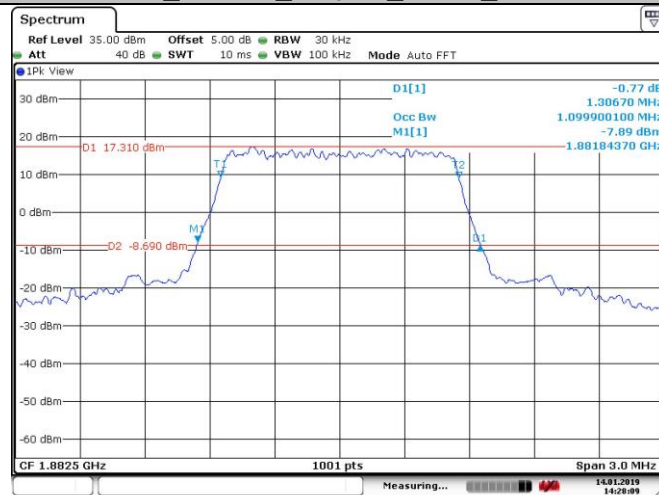


Band25_1.4MHz_16QAM_26047_6RB#0



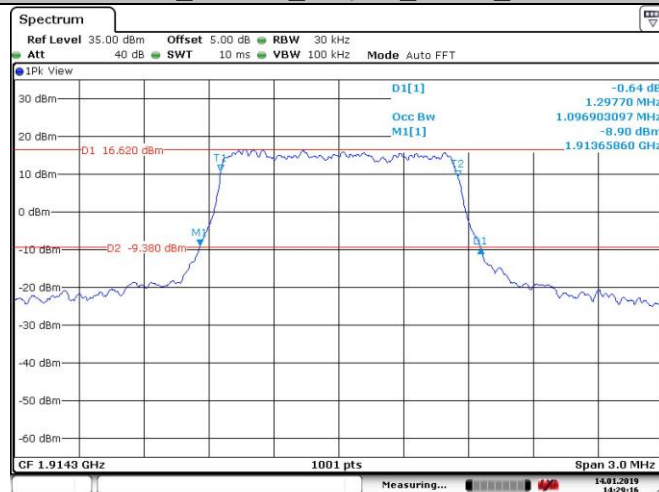
Date: 14 JAN 2019 14:25:14

Band25_1.4MHz_16QAM_26365_6RB#0



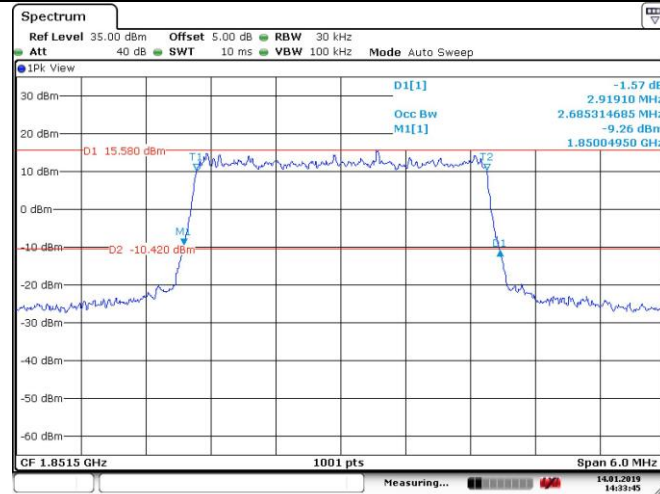
Date: 14 JAN 2019 14:28:09

Band25_1.4MHz_16QAM_26683_6RB#0



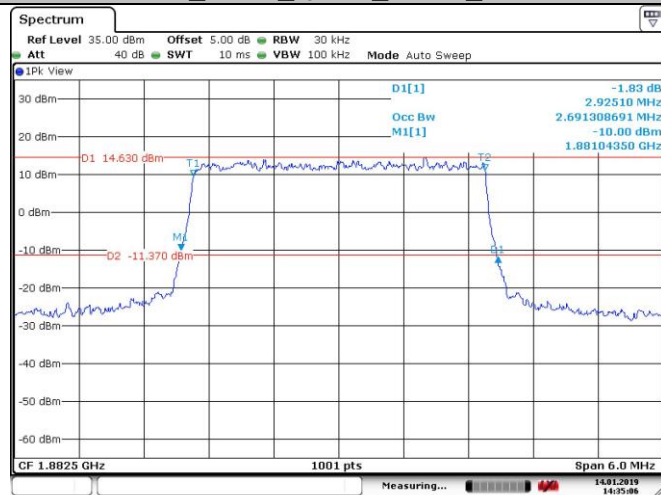
Date: 14 JAN 2019 14:29:16

Band25_3MHz_QPSK_26055_15RB#0



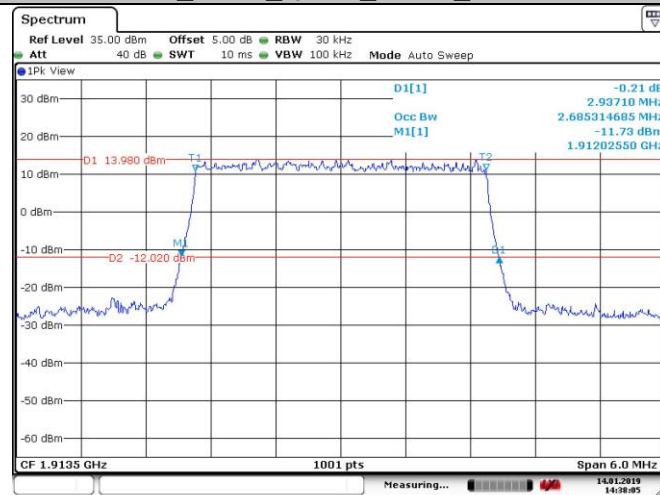
Date: 14 JAN 2019 14:33:46

Band25_3MHz_QPSK_26365_15RB#0



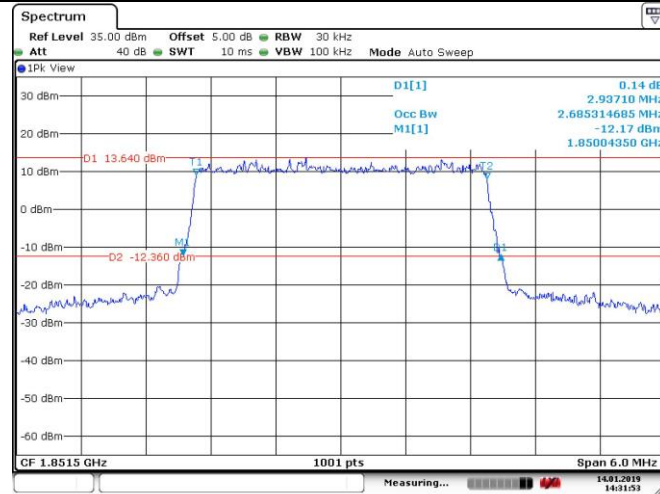
Date: 14 JAN 2019 14:35:07

Band25_3MHz_QPSK_26675_15RB#0



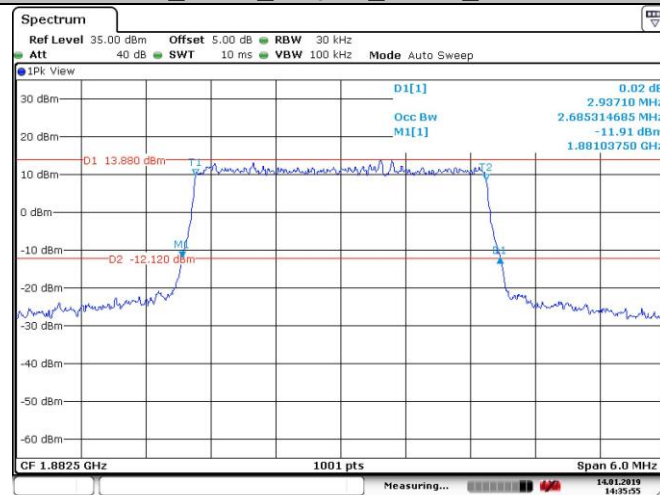
Date: 14 JAN 2019 14:38:05

Band25_3MHz_16QAM_26055_15RB#0



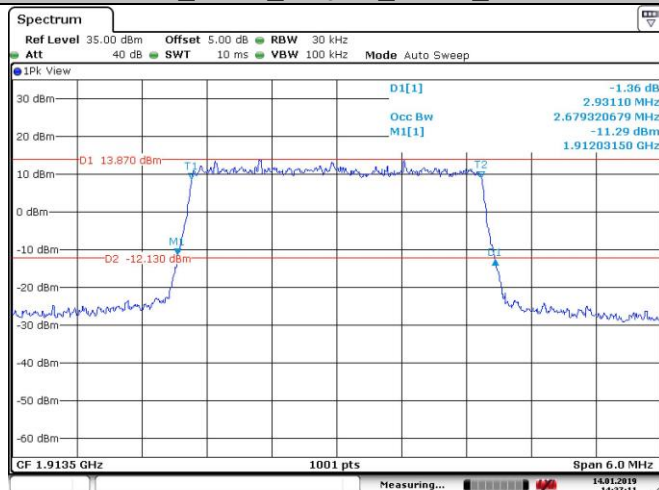
Date: 14 JAN 2019 14:31:53

Band25_3MHz_16QAM_26365_15RB#0



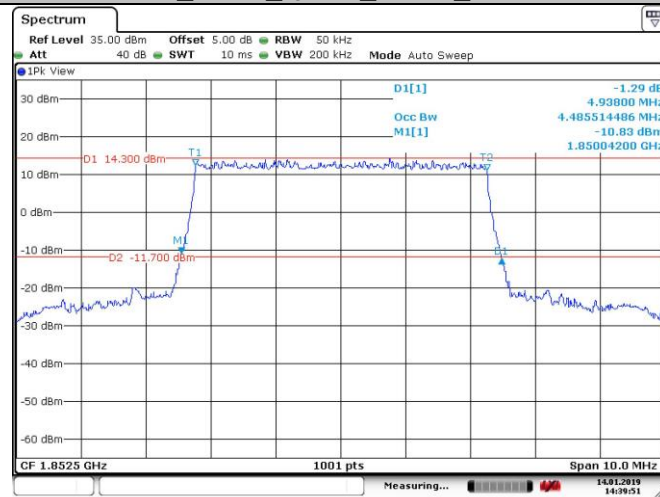
Date: 14 JAN 2019 14:35:56

Band25_3MHz_16QAM_26675_15RB#0



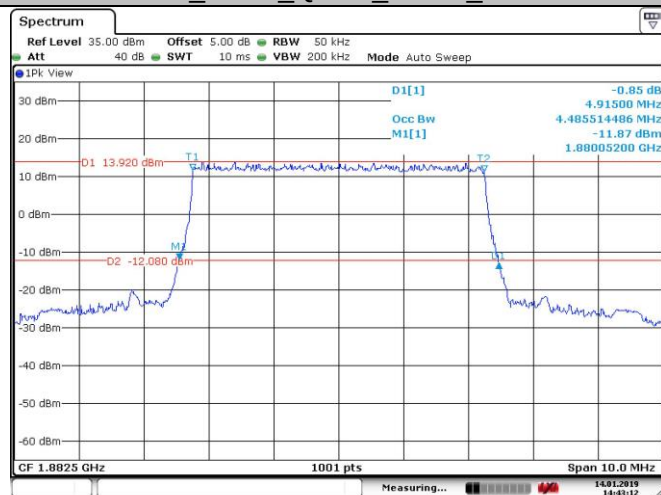
Date: 14 JAN 2019 14:37:11

Band25_5MHz_QPSK_26065_25RB#0



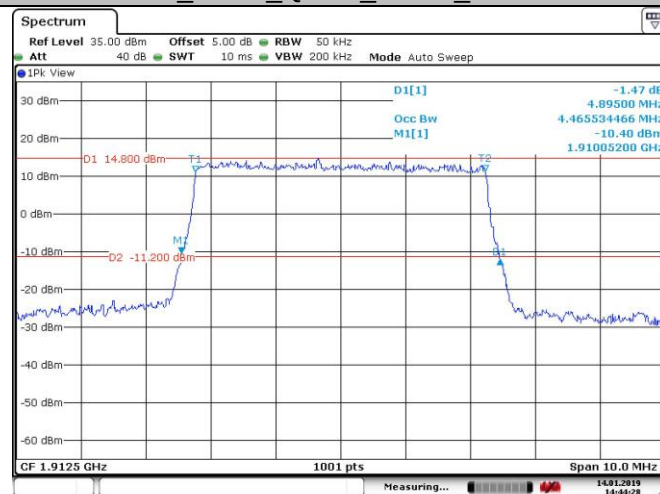
Date: 14 JAN 2019 14:39:52

Band25_5MHz_QPSK_26365_25RB#0



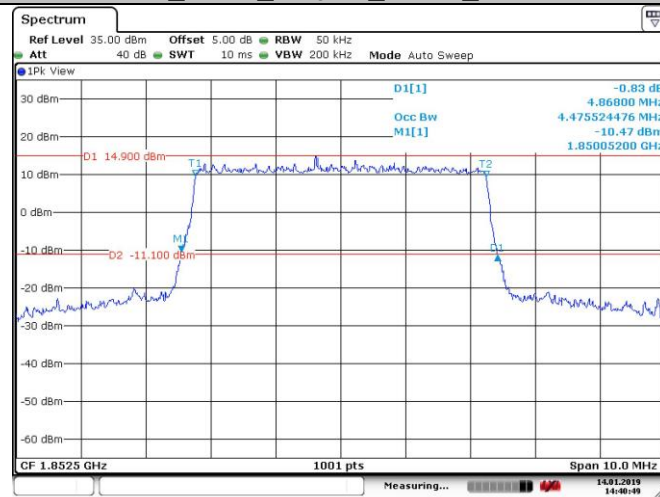
Date: 14 JAN 2019 14:43:12

Band25_5MHz_QPSK_26665_25RB#0



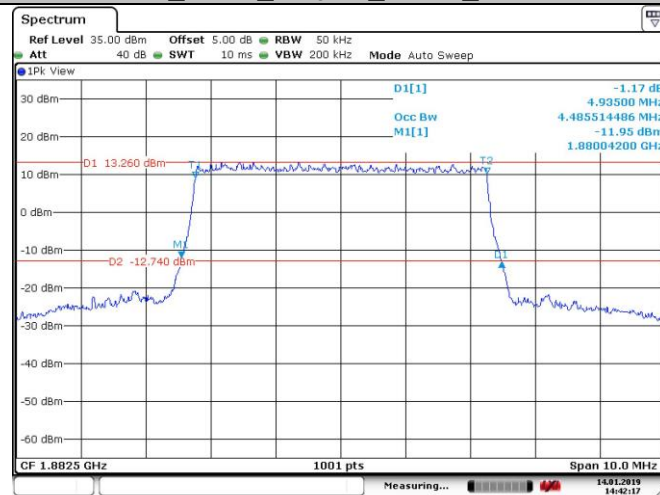
Date: 14 JAN 2019 14:44:29

Band25_5MHz_16QAM_26065_25RB#0



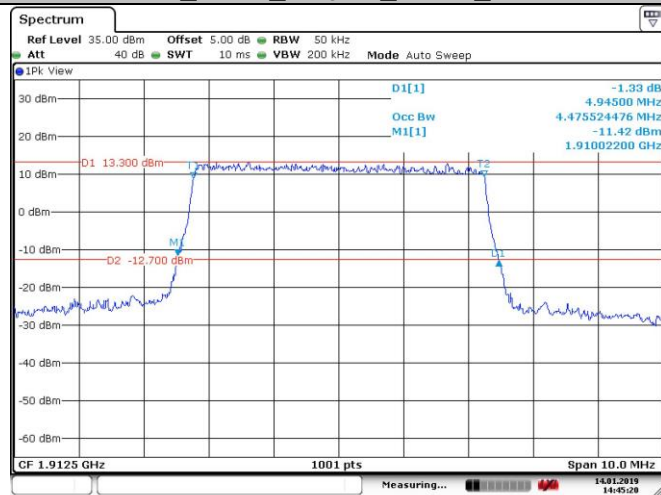
Date: 14 JAN 2019 14:40:50

Band25_5MHz_16QAM_26365_25RB#0



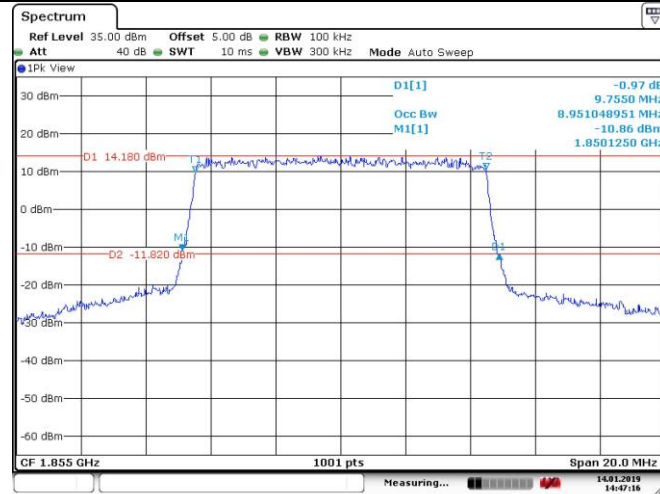
Date: 14 JAN 2019 14:42:17

Band25_5MHz_16QAM_26665_25RB#0



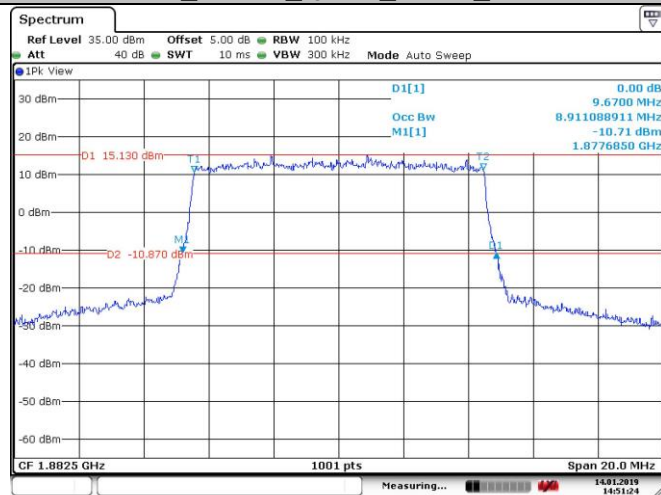
Date: 14 JAN 2019 14:45:21

Band25_10MHz_QPSK_26090_50RB#0



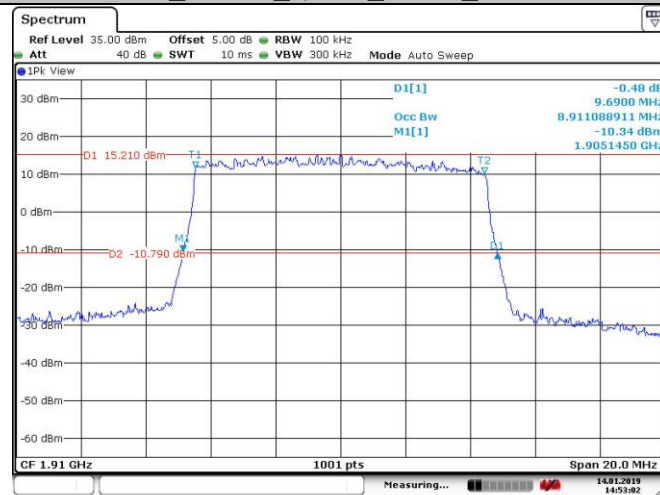
Date: 14 JAN 2019 14:47:15

Band25_10MHz_QPSK_26365_50RB#0



Date: 14 JAN 2019 14:51:24

Band25_10MHz_QPSK_26640_50RB#0



Date: 14 JAN 2019 14:53:02